

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.00	Rating **	U	Issue No.	121					
LM End	0.00	Issue Type +	Ma	Location *	N/A					
Category	Earthen Levee		GPS Latitude/Longitude							
			Start	End						
Item	Operations & Maintenance Manuals			°	°					
				°	°					
DWR ID	DWR_RD0524_01_s_2012_121									
Action/Comments										
Inspector Comments: The LMA did not appear to have a copy of the O&M Manual.										

No Photos

LM Start	0.00	Rating **	M	Issue No.	123					
LM End	0.00	Issue Type +	Ma	Location *	N/A					
Category	Earthen Levee		GPS Latitude/Longitude							
			Start	End						
Item	Flood Preparedness & Training			°	°					
				°	°					
DWR ID	DWR_RD0524_01_s_2012_123									
Action/Comments										
Inspector Comments: No recent training.										

No Photos

LM Start	0.00	Rating **	M	Issue No.	138					
LM End	0.00	Issue Type +	Ma	Location *	N/A					
Category	Earthen Levee		GPS Latitude/Longitude							
			Start	End						
Item	Emergency Supplies & Equipment			°	°					
				°	°					
DWR ID	DWR_RD0524_01_s_2013_138									
Action/Comments										
Inspector Comments: The LMA did not appear to have emergency supplies or equipment.										

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.18	Rating **	U	Issue No.	129
LM End	0.18	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.939085 °	37.939085 °
				-121.343917 °	-121.343917 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: The erosion was discovered during 2013 spring levee inspection. Inspector comment: Erosion is located along the lower level of water-ward slope. [2014 Site ID:RD0524U01RM40.85]					

Photo 1 of 1 : SJR2014_RD0524U01RM40.85_1.jpg



Close view of the erosion.

LM Start	0.22	Rating **	M	Issue No.	3
LM End	0.22	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.938890 °	37.938890 °
				-121.343657 °	-121.343657 °
DWR ID	DWR_RD0524_01_s_2012_3				
Action/Comments					
Repair depressions or ruts in the crown or slope.					
Inspector Comments: No change in status.					

Photo 1 of 3 : FA_2014_RD0524_107_3_20141020_00007.jpg



Looking west at 3" depression on levee crown. (Spring 2012)

LM Start	0.22	Rating **	M	Issue No.	3 (cont)
LM End	0.22	Issue Type +	Ma	Location *	CR

Photo 2 of 3 : FA_2014_RD0524_107_3_20141020_00008.jpg



Looking west at depression on levee crown near waterward shoulder.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.34	Rating **	M	Issue No.	180
LM End	0.34	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.938461 °	37.938461 °
				-121.341626 °	-121.341626 °
DWR ID	DWR_RD0524_01_s_2014_180				
Action/Comments					
Schedule repair of erosion site prior to the next inspection. Inspector Comments: Erosion is located along the lower level of waterward slope.					

Photo 1 of 2 : FA_2014_RD0524_107_180_20141020_00135.jpg



Looking southeast at erosion on waterward toe.

LM Start	0.34	Rating **	M	Issue No.	180 (cont)
LM End	0.34	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2014_RD0524_107_180_20141020_00136.jpg



Looking northeast at erosion on waterward toe.

LM Start	0.40	Rating **	U	Issue No.	131
LM End	0.40	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.938870 °	37.938870 °
				-121.340460 °	-121.340460 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change at this site. 8/7/2012: The erosion is at the upper levee slope, and likely caused by slope slip. The lower levee slope is covered with dense vegetation. [2014 Site ID:RD0524U01RM40.99]					

Photo 1 of 1 : SJR2014_RD0524U01RM40.99_1.jpg



Front view of the erosion site. Note the vegetation at the levee toe and lower slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.63	Rating **	M	Issue No.	10
LM End	0.63	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.938247 °	37.938247 °
				-121.336503 °	-121.336503 °
DWR ID	DWR_RD0524_01_s_2012_10				
Action/Comments					
Repair the levee slope damaged by foot traffic and prevent access where possible.					

Photo 1 of 1 : FA_2014_RD0524_107_10_20141020_00013.jpg



Looking east at waterside erosion appears to be caused by runoff.

LM Start	0.65	Rating **	M	Issue No.	13
LM End	0.66	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.938105 °	37.938023 °
				-121.336288 °	-121.336173 °
DWR ID	DWR_RD0524_01_s_2012_13				
Action/Comments					
Repair slope instability.					
Inspector Comments: Erosion extends from mid levee slope to shoulder.					

Photo 1 of 3 : FA_2014_RD0524_107_13_20141020_00018.jpg



Erosion from LM 0.65 to 0.66

LM Start	0.65	Rating **	M	Issue No.	13 (cont)
LM End	0.66	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA_2014_RD0524_107_13_20141020_00019.jpg



Looking south at erosion on waterside shoulder.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.65	Rating **	M	Issue No.	13 (cont)
LM End	0.66	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.938105 °	37.938023 °
				-121.336288 °	-121.336173 °
DWR ID	DWR_RD0524_01_s_2012_13				
Action/Comments					
Repair slope instability.					
Inspector Comments: Erosion extends from mid levee slope to shoulder.					

Photo 3 of 3 : FA_2014_RD0524_107_13_20141020_00020.jpg



Update of erosion site at LM 0.65 to 0.66

LM Start	0.68	Rating **	M	Issue No.	14
LM End	0.68	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.937808 °	37.937808 °
				-121.335913 °	-121.335913 °
DWR ID	DWR_RD0524_01_s_2012_14				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Bamboo on waterward slope.					

Photo 1 of 3 : FA_2014_RD0524_107_14_20141020_00021.jpg



Looking southeast at bamboo on waterside shoulder as of 4/2010.

LM Start	0.68	Rating **	M	Issue No.	14 (cont)
LM End	0.68	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : FA_2014_RD0524_107_14_20141020_00022.jpg



Looking south at dying bamboo on waterward slope. (Spring 2013)

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LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
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M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
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Reclamation District No. 0524 Middle Roberts Island

Looking south at bamboo on waterside slope. (Fall 2012)

Front view of the erosion site. Vegetation is visible.

Looking southwest at vegetation on landward slope and toe. (Spring 2013)

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Looking west at dense vegetation on landside toe.

Looking southwest at low hanging tree branches at landside toe.

Looking southwest at hole on landward shoulder.

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.82	Rating **	U	Issue No.	2 (cont)	
LM End	0.82	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.936093 °	37.936004 °	
				-121.334648 °	-121.334615 °	
DWR ID	DWR_RD0524_01_f_2013_2					
Action/Comments						
Schedule repair of erosion site prior to the next inspection. Inspector Comments: Several holes and finger erosions on landward slope.						

Photo 2 of 5 : FA_2014_RD0524_107_2_20141020_00003.jpg



Looking west at hole on landward shoulder.

LM Start	0.82	Rating **	U	Issue No.	2 (cont)
LM End	0.82	Issue Type +	Ma	Location *	LS

Photo 3 of 5 : FA_2014_RD0524_107_2_20141020_00004.jpg



Looking southeast at finger erosion on landward slope.

LM Start	0.82	Rating **	U	Issue No.	2 (cont)
LM End	0.82	Issue Type +	Ma	Location *	LS

Photo 4 of 5 : FA_2014_RD0524_107_2_20141020_00005.jpg



Looking east at erosion on landward slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.82	Rating **	U	Issue No.	2 (cont)	
LM End	0.82	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			37.936093 °	37.936004 °	
				-121.334648 °	-121.334615 °	
DWR ID	DWR_RD0524_01_f_2013_2					
Action/Comments						
Schedule repair of erosion site prior to the next inspection. Inspector Comments: Several holes and finger erosions on landward slope.						

Photo 5 of 5 : FA_2014_RD0524_107_2_20141020_00006.jpg



Looking northeast at several finger erosion on landward slope.

LM Start	0.83	Rating **	U	Issue No.	133
LM End	0.84	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935930 °	37.935930 °
				-121.334133 °	-121.334133 °
DWR ID					
Action/Comments					
Inspector Comments: 06/19/2014: No significant change observed. 08/13/2013: Site was discovered during boat survey. The dense vegetation blocks a clear view of the erosion. Size of erosion site was very roughly estimated. [2014 Site ID:RD0524U01RM41.44]					

Photo 1 of 1 : SJR2014_RD0524U01RM41.44_1.jpg



Close view of the site. Dense vegetation covers the erosion.

LM Start	0.91	Rating **	U	Issue No.	134
LM End	0.91	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935576 °	37.935576 °
				-121.333202 °	-121.333202 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change at this site. 08/07/2012: The site has been visited by boat survey. No significant change observed 08/23/2011: The erosion site is immediately downstream of the riprap protection. [2014 Site ID:RD0524U01RM41.5]					

Photo 1 of 1 : SJR2014_RD0524U01RM41.5_1.jpg



Front view of the erosion. Note the riprap protection near the site.

* Location
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	0.92	Rating **	M	Issue No.	122
LM End	0.92	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.935267 °	37.935267 °
				-121.332985 °	-121.332985 °
DWR ID	DWR_RD0524_01_s_2013_122				
Action/Comments					
Pipe					
Inspector Comments: Inch and half metal pipe should be removed.					

Photo 1 of 1 : FA_2014_RD0524_107_122_20141020_00113.jpg



Looking northwest at inch and half metal pipe on waterward slope.

LM Start	0.94	Rating **	M	Issue No.	77
LM End	1.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.935259 °	37.935049 °
				-121.332864 °	-121.331334 °
DWR ID	DWR_RD0524_01_s_2012_77				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : FA_2014_RD0524_107_77_20141020_00079.jpg



Looking south at low hanging tree branches at landside toe.

LM Start	0.97	Rating **	A/W	Issue No.	20
LM End	0.97	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.935181 °	37.935181 °
				-121.332297 °	-121.332297 °
DWR ID	DWR_RD0524_01_f_2013_20				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level.					

No Photos

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
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+ Issue Type
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.00	Rating **	U	Issue No.	135
LM End	1.00	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935410 °	37.935410 °
				-121.331560 °	-121.331560 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change at this site. 08/07/2012: The erosion was discovered during the boat survey. [2014 Site ID:RD0524U01RM41.58]					

Photo 1 of 1 : SJR2014_RD0524U01RM41.58_1.jpg



Close view of the erosion.

LM Start	1.00	Rating **	U	Issue No.	139
LM End	1.00	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.935326 °	37.935326 °
				-121.331537 °	-121.331537 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change at this site. 08/07/2012: The site has been visited by boat survey. Site has been repaired, but new erosion occurred at the levee slope and immediately upstream of the repaired site. 08/23/2011: The site is about 500 ft downstream of bridge. The levee toe seems to be protected, but the protection is being washed away. [2014 Site ID:RD0524U01RM41.59]					

Photo 1 of 1 : SJR2014_RD0524U01RM41.59_1.jpg



Front view of the site.

LM Start	1.03	Rating **	M	Issue No.	17
LM End	1.03	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.935018 °	37.935098 °
				-121.331248 °	-121.331645 °
DWR ID	DWR_RD0524_01_s_2012_17				
Action/Comments					
Schedule repair of erosion site prior to the next inspection.					
Inspector Comments: Minor erosion was noted next to repaired site.					

Photo 1 of 3 : FA_2014_RD0524_107_17_20141020_00024.jpg



Looking upstream (south) at erosion site.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
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Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.09	Rating **	M	Issue No.	18 (cont)
LM End	1.09	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.934645 °	37.934645 °
				-121.330310 °	-121.330310 °
DWR ID	DWR_RD0524_01_s_2012_18				
Action/Comments					
Repair slope instability. Inspector Comments: Slope damage extend from shoulder to middle of slope.					

LM Start	1.09	Rating **	M	Issue No.	18 (cont)
LM End	1.09	Issue Type +	Ma	Location *	LS

LM Start	1.09	Rating **	M	Issue No.	18 (cont)
LM End	1.09	Issue Type +	Ma	Location *	LS

Photo 2 of 5 : FA_2014_RD0524_107_18_20141020_00028.jpg



Updated picture of the erosion site on the landside shoulder.

Photo 3 of 5 : FA_2014_RD0524_107_18_20141020_00029.jpg



Looking south at caving on landside shoulder. (Sping 2012)

Photo 4 of 5 : FA_2014_RD0524_107_18_20141020_00030.jpg



Looking at updated slope stability as of 4/2010.

*** Location**
 LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**
 A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

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Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.09	Rating **	M	Issue No.	18 (cont)
LM End	1.09	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.934645 °	37.934645 °
				-121.330310 °	-121.330310 °
DWR ID	DWR_RD0524_01_s_2012_18				
Action/Comments					
Repair slope instability. Inspector Comments: Slope damage extend from shoulder to middle of slope.					



Updated view from above the slope stability.

LM Start	1.14	Rating **	M	Issue No.	175
LM End	1.14	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.934171 °	37.934171 °
				-121.329584 °	-121.329584 °
DWR ID	DWR_RD0524_01_f_2014_175				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level. Inspector Comments: T					

No Photos

LM Start	1.14	Rating **	M	Issue No.	19
LM End	1.17	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.934118 °	37.933775 °
				-121.329657 °	-121.329305 °
DWR ID	DWR_RD0524_01_s_2012_19				
Action/Comments					
Trim trees to at least five feet above ground level.					



Looking northwest at low hanging tree branches at waterside toe.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
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U : Unacceptable A/W : Acceptable but Monitor & Maintain

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.16	Rating **	U	Issue No.	141
LM End	1.24	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.933347 °	37.933347 °
				-121.329110 °	-121.329110 °
DWR ID					

Action/Comments

Inspector Comments: 6/19/2014: No significant change observed.
08/13/2013: No significant change at this site.
08/07/2012: The site has been visited by boat survey. No significant change observed
08/23/2011: No significant change observed on site.
9/07/2010: No significant change observed on site. Vegetation is visible at the water line. There is an exposed pipe discharge partially hanging at the mid-slope, possibly still used for discharging irrigation/runoff water. There is minimal rip rap protection along the bank, and what's left of it is no longer adequately protecting the bank.
9/29/2009: Site consists of a 400-foot long eroding bank with minimal vegetation and protection; the existing rip rap has sloughed, rendering it useless; note that there is an exposed section of a pipe.
10/18/2006: There is extensive loss of rip rap on some sections; sewage disposal pond is on the landside of the levee; there is an exposed pipe outlet "hanging" from the upper slope. [2014 Site ID:RD0524U01RM41.79]

Photo 1 of 1 : SJR2014_RD0524U01RM41.79_1.jpg



Direct view of the site.

LM Start	1.17	Rating **	M	Issue No.	915
LM End	1.25	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.933775 °	37.932784 °
				-121.329250 °	-121.328765 °
DWR ID	DWR_RD0524_01_s_2012_915				

Action/Comments

Remove the wild growth other than native grasses from the levee slopes.

Photo 1 of 1 : FA_2014_RD0524_107_915_20141020_00151.jpg



Looking southwest at dense veg. on landside toe.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.29	Rating **	U	Issue No.	142
LM End	1.32	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.931858 °	37.931858 °
				-121.328300 °	-121.328300 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: New signs of animal activity were found. 08/07/2012: The site was first reported in 2012 spring levee inspection report. [2014 Site ID:RD0524U01RM41.92]					

Photo 1 of 1 : SJR2014_RD0524U01RM41.92_1.jpg



Front view of the erosion. Note the drainage pipe on the site.

LM Start	1.31	Rating **	M	Issue No.	33
LM End	1.31	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.931948 °	37.931948 °
				-121.328387 °	-121.328387 °
DWR ID	DWR_RD0524_01_s_2012_33				
Action/Comments					
Pipe Inspector Comments: Pipe is not in use and should be properly abandoned.					

Photo 1 of 2 : FA_2014_RD0524_107_33_20141020_00041.jpg



Looking west at pipe on landside slope.

LM Start	1.31	Rating **	M	Issue No.	33 (cont)
LM End	1.31	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2014_RD0524_107_33_20141020_00042.jpg



Looking north at broken pipe.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.33	Rating **	M	Issue No.	130
LM End	1.37	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			37.931658 °	37.931085 °
				-121.328255 °	-121.328112 °
DWR ID	DWR_RD0524_01_s_2013_130				
Action/Comments					
Add appropriate gravel or road base. Grade and compact.					

No Photos

LM Start	1.39	Rating **	U	Issue No.	143
LM End	1.39	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.930575 °	37.930575 °
				-121.328090 °	-121.328090 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change observed. 08/07/2012: The site was first reported in 2012 spring levee inspection report. The site is located about 750 ft downstream of SR 4 Bridge. [2014 Site ID:RD0524U01RM42.03]					

Photo 1 of 1 : SJR2014_RD0524U01RM42.03_1.jpg



Front view of the erosion.

LM Start	1.45	Rating **	U	Issue No.	144
LM End	1.47	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.929650 °	37.929650 °
				-121.328110 °	-121.328110 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: The site is located approximately 400 ft. downstream SR 4 Bridge. Dense vegetation is visible at the toe. [2014 Site ID:RD0524U01RM42.09]					

Photo 1 of 1 : SJR2014_RD0524U01RM42.09_1.jpg



Front view of the erosion site.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

Looking south at dense veg. on landside slope and toe.

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Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.55	Rating **	A/W	Issue No.	23
LM End	1.60	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.928388 °	37.927797 °
				-121.328280 °	-121.327854 °
DWR ID	DWR_RD0524_01_s_2012_23				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

LM Start	1.55	Rating **	A/W	Issue No.	23 (cont)
LM End	1.60	Issue Type +	Ma	Location *	LS

LM Start	1.55	Rating **	A/W	Issue No.	23 (cont)
LM End	1.60	Issue Type +	Ma	Location *	LS

Photo 1 of 5 : FA_2014_RD0524_107_23_20141020_00035.jpg



Overgrown landscaping on landward slope from LM 1.56 to 1.74

Photo 2 of 5 : FA_2014_RD0524_107_23_20141023_00195.jpg



Looking north from landward berm at corrected site.

Photo 3 of 5 : FA_2014_RD0524_107_23_20141023_00196.jpg



Looking east from landward berm at corrected site.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.60	Rating **	M	Issue No.	136
LM End	1.60	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.927775 °	37.927775 °
				-121.327860 °	-121.327860 °
DWR ID	DWR_RD0524_01_s_2013_136				
Action/Comments					
Repair the levee slope damaged by foot traffic and prevent access where possible.					

Photo 1 of 1 : FA_2014_RD0524_107_136_20141020_00125.jpg



Looking south at depression on levee crown near waterward shoulder.

LM Start	1.62	Rating **	M	Issue No.	24
LM End	1.63	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.927635 °	37.927540 °
				-121.327812 °	-121.327648 °
DWR ID	DWR_RD0524_01_s_2012_24				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Vegetation blocking landward toe.					

Photo 1 of 2 : FA_2014_RD0524_107_24_20141023_00199.jpg



Looking south at vegetation blocking view of landward toe.

LM Start	1.62	Rating **	M	Issue No.	24 (cont)
LM End	1.63	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2014_RD0524_107_24_20141020_00036.jpg



Looking north at dense vegetation on the landside and waterside slopes.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.62	Rating **	A/W	Issue No.	25
LM End	1.63	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.927635 °	37.927540 °
				-121.327812 °	-121.327648 °
DWR ID	DWR_RD0524_01_s _ 2012_25				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					



Looking southeast at dense vegetation on the waterside slope.

LM Start	1.63	Rating **	M	Issue No.	26
LM End	1.66	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.927507 °	37.927295 °
				-121.327593 °	-121.327298 °
DWR ID	DWR_RD0524_01_s _ 2012_26				
Action/Comments					
Note and monitor erosion site.					

No Photos

LM Start	1.66	Rating **	N	Issue No.	8
LM End	1.70	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.927255 °	37.926855 °
				-121.327137 °	-121.326672 °
DWR ID	DWR_RD0524_01_s _ 2012_8				
Action/Comments					
Tree stumps.					
Inspector Comments: Several tree stumps on waterside shoulder.					

No Photos

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	1.71	Rating **	M	Issue No.	27
LM End	1.73	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.926728 °	37.926730 °
				-121.326597 °	-121.326508 °
DWR ID	DWR_RD0524_01_s_2012_27				
Action/Comments					
Repair slope instability.					

No Photos

LM Start	1.75	Rating **	M	Issue No.	28
LM End	1.75	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.926322 °	37.926322 °
				-121.326115 °	-121.326115 °
DWR ID	DWR_RD0524_01_s_2012_28				
Action/Comments					
Garbage Inspector Comments: Large pruning piles on landside slope.					

Photo 1 of 2 : FA_2014_RD0524_107_28_20141023_00200.jpg



Looking southwest at trash and a pruning pile on landward berm.

Photo 2 of 2 : FA_2014_RD0524_107_28_20141020_00038.jpg



Looking at southwest at a pruning pile at landward berm.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Reclamation District No. 0524 Middle Roberts Island

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.10	Rating **	A/W	Issue No.	183
LM End	2.10	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.922009 °	37.922009 °
				-121.323015 °	-121.323015 °
DWR ID	DWR_RD0524_01_s_2014_183				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Cactus on waterward slope.					

No Photos

LM Start	2.15	Rating **	A/W	Issue No.	6
LM End	2.22	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.921540 °	37.920959 °
				-121.322293 °	-121.321365 °
DWR ID	DWR_RD0524_01_f_2012_6				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

No Photos

LM Start	2.17	Rating **	A/W	Issue No.	30
LM End	2.18	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.921383 °	37.921300 °
				-121.322043 °	-121.321902 °
DWR ID	DWR_RD0524_01_s_2012_30				
Action/Comments					
Note and monitor erosion site.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 0524 Middle Roberts Island

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.29	Rating **	U	Issue No.	32
LM End	2.31	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.920372 °	37.920273 °
				-121.320230 °	-121.320022 °
DWR ID	DWR_RD0524_01_s_2012_32				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

Photo 1 of 1 : FA_2014_RD0524_107_32_20141020_00040.jpg



Looking south at dense veg on landside slope and toe.

LM Start	2.31	Rating **	C	Issue No.	148
LM End	2.33	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.919885 °	37.919885 °
				-121.319710 °	-121.319710 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: The erosion was repaired. 08/13/2013: The length of erosion has progressed downstream, and the site length has increased from 12 ft in length last year to 100 feet in length this year. 08/07/2012: The site was first reported in the 2012 spring levee inspection report. The site is located at the inside corner of a river bend. [2014 Site ID:RD0524U01RM42.93]					

No Photos

LM Start	2.34	Rating **	M	Issue No.	34
LM End	2.35	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.919885 °	37.919703 °
				-121.319713 °	-121.319702 °
DWR ID	DWR_RD0524_01_s_2012_34				
Action/Comments					
Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comments: Slope damage caused by walking traffic and using bank as a fishing platform.					

Photo 1 of 1 : FA_2014_RD0524_107_34_20141020_00043.jpg



Looking northeast at damage to the slope possibly caused by human activity.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.35	Rating **	M	Issue No.	107
LM End	2.35	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.919742 °	37.919742 °
				-121.319623 °	-121.319623 °
DWR ID	DWR_RD0524_01_s_2012_107				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	2.40	Rating **	M	Issue No.	184
LM End	2.40	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.919036 °	37.919036 °
				-121.319969 °	-121.319969 °
DWR ID	DWR_RD0524_01_s_2014_184				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	2.44	Rating **	U	Issue No.	35
LM End	2.48	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918498 °	37.918515 °
				-121.321078 °	-121.321110 °
DWR ID	DWR_RD0524_01_s_2012_35				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

Photo 1 of 1 : FA_2014_RD0524_107_35_20141020_00044.jpg



Looking southwest at dense vegetation on landward toe.

*** Location**
 LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**
 A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
 Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.46	Rating **	M	Issue No.	36
LM End	2.50	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.918628 °	37.918438 °
				-121.320817 °	-121.321452 °
DWR ID	DWR_RD0524_01_s_2012_36				
Action/Comments					
Note and monitor erosion site.					

Photo 1 of 1 : FA_2014_RD0524_107_36_20141020_00045.jpg



Looking east at erosion on waterside slope.

LM Start	2.48	Rating **	M	Issue No.	80
LM End	2.48	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.918480 °	37.918480 °
				-121.321114 °	-121.321114 °
DWR ID	DWR_RD0524_01_s_2012_80				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 2 : FA_2014_RD0524_107_80_20141020_00082.jpg

Looking southwest at dense vegetation and trees on landside slope.
(Fall 2012)

LM Start	2.48	Rating **	M	Issue No.	80 (cont)
LM End	2.48	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2014_RD0524_107_80_20141020_00083.jpg



Looking southwest at dense vegetation on landside toe.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.52	Rating **	U	Issue No.	37 (cont)	
LM End	2.52	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			37.918345 °		37.918302 °
				-121.321765 °		-121.321923 °
DWR ID	DWR_RD0524_01_s_2012_37					
Action/Comments						
Elderberries are blocking visibility and flood fight capability.						

Photo 4 of 4 : FA_2014_RD0524_107_37_20141020_00049.jpg



Looking southwest at trees along levee landside toe.

LM Start	2.53	Rating **	U	Issue No.	38
LM End	2.53	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.918287 °	37.918287 °
				-121.321980 °	-121.321980 °
DWR ID	DWR_RD0524_01_s_2012_38				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

Photo 1 of 2 : FA_2014_RD0524_107_38_20141020_00050.jpg



Looking north at elderberry on waterside slope.

LM Start	2.53	Rating **	U	Issue No.	38 (cont)
LM End	2.53	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : FA_2014_RD0524_107_38_20141020_00051.jpg



Looking south at elderberry on waterside slope.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.60	Rating **	M	Issue No.	917
LM End	2.60	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.917475 °	37.917475 °
				-121.322808 °	-121.322808 °
DWR ID	DWR_RD0524_01_s_2012_917				
Action/Comments					
Repair the levee slope damaged by livestock and prevent large animal access.					

No Photos

LM Start	2.61	Rating **	A/W	Issue No.	9
LM End	2.61	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.917228 °	37.917228 °
				-121.322730 °	-121.322730 °
DWR ID	DWR_RD0524_01_s_2012_9				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

No Photos

LM Start	2.63	Rating **	M	Issue No.	185
LM End	2.66	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.917152 °	37.916807 °
				-121.322582 °	-121.322069 °
DWR ID	DWR_RD0524_01_s_2014_185				
Action/Comments					
Thin trees to allow visibility of the ground and room to flood fight.					

No Photos

*** Location**
 LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**
 A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
 Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
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Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.65	Rating **	C	Issue No.	192
LM End	2.65	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.916650 °	37.916650 °
				-121.321980 °	-121.321980 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: The erosion was repaired. 08/13/2013: No significant change observed. 08/07/2012: The site was first reported in 2012 spring levee inspection report. [2014 Site ID:RD0524U01RM43.23]					

No Photos

LM Start	2.66	Rating **	M	Issue No.	43
LM End	2.66	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.916780 °	37.916780 °
				-121.322095 °	-121.322095 °
DWR ID	DWR_RD0524_01_s_2012_43				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

No Photos

LM Start	2.67	Rating **	M	Issue No.	918
LM End	2.69	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.916718 °	37.916502 °
				-121.322020 °	-121.321980 °
DWR ID	DWR_RD0524_01_s_2012_918				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.71	Rating **	M	Issue No.	21 (cont)
LM End	2.71	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.916224 °	37.916224 °
				-121.322115 °	-121.322115 °
DWR ID	DWR_RD0524_01_f_2013_21				
Action/Comments					
Schedule repair of erosion site prior to the next inspection. Inspector Comments: Large erosion around irrigation pipe.					

Photo 2 of 2 : FA_2014_RD0524_107_21_20141020_00034.jpg



Looking east at erosion around irrigation pipe on waterward slope.

LM Start	2.73	Rating **	A/W	Issue No.	264
LM End	2.73	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.915968 °	37.915968 °
				-121.322275 °	-121.322275 °
DWR ID	DWR_RD0524_01_s_2012_264				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level.					

No Photos

LM Start	2.73	Rating **	M	Issue No.	60
LM End	2.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.915747 °	37.915492 °
				-121.322470 °	-121.322639 °
DWR ID	DWR_RD0524_01_s_2012_60				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

*** Location**
 LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**
 A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
 Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.77	Rating **	A/W	Issue No.	70
LM End	2.77	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.915503 °	37.915503 °
				-121.322745 °	-121.322745 °
DWR ID	DWR_RD0524_01_s_2012_70				
Action/Comments					
Tree or limb					
Inspector Comments: Broken tree branch.					

No Photos

LM Start	2.80	Rating **	M	Issue No.	126
LM End	2.80	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.878920 °	37.878920 °
				-121.332670 °	-121.332670 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: Larger trees are at the levee shoulder, and an irrigation pump station is next to the erosion site. [2014 Site ID:RD0524U01RM46.06]					

Photo 1 of 1 : SJR2014_RD0524U01RM46.06_1.jpg



Front view of the erosion.

LM Start	2.82	Rating **	U	Issue No.	48
LM End	2.82	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.915022 °	37.915022 °
				-121.323443 °	-121.323443 °
DWR ID	DWR_RD0524_01_s_2012_48				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					

Photo 1 of 2 : FA_2014_RD0524_107_48_20141020_00061.jpg



Looking south at dense elderberry on landside slope.(Spring 2012)

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
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Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.82	Rating **	U	Issue No.	48 (cont)	
LM End	2.82	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			37.915022 °		37.915022 °
				-121.323443 °		-121.323443 °
DWR ID	DWR_RD0524_01_s _ 2012_48					
Action/Comments						
Elderberries are blocking visibility and flood fight capability.						



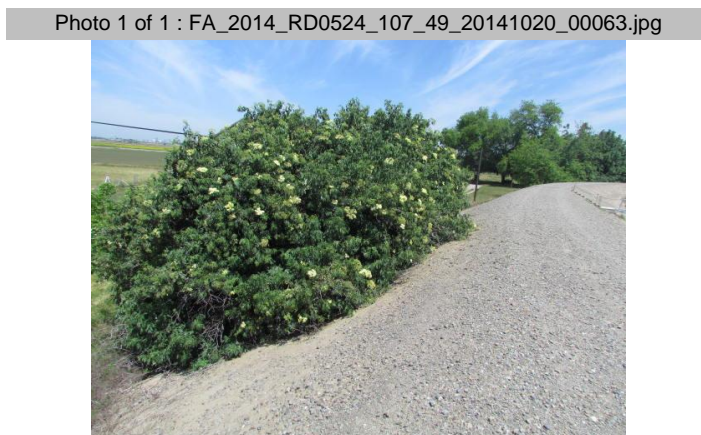
Looking south at elderberry on landside slope.(Spring 2011)

LM Start	2.83	Rating **	U	Issue No.	91
LM End	2.83	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.915063 °	37.915063 °
				-121.323585 °	-121.323585 °
DWR ID	DWR_RD0524_01_s _ 2012_91				
Action/Comments					
Thin trees to allow visibility of the ground and room to flood fight.					



Looking southwest at dense vegetation on landside slope.

LM Start	2.88	Rating **	U	Issue No.	49
LM End	2.88	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.914427 °	37.914427 °
				-121.324198 °	-121.324198 °
DWR ID	DWR_RD0524_01_s _ 2012_49				
Action/Comments					
Elderberries are blocking visibility and flood fight capability.					



Looking northwest at elderberry on landside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	2.93	Rating **	U	Issue No.	50
LM End	2.95	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.913767 °	37.913503 °
				-121.324427 °	-121.324488 °
DWR ID	DWR_RD0524_01_s _ 2012_50				
Action/Comments					
Prunings					

Photo 1 of 1 : FA_2014_RD0524_107_50_20141020_00064.jpg



Looking southwest at prunings on landside slope.

LM Start	2.96	Rating **	M	Issue No.	51
LM End	2.96	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.913415 °	37.913415 °
				-121.324503 °	-121.324503 °
DWR ID	DWR_RD0524_01_s _ 2012_51				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	2.96	Rating **	U	Issue No.	193
LM End	2.96	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.913010 °	37.913010 °
				-121.324490 °	-121.324490 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change observed. 08/07/2012: The site was first reported in 2012 spring levee inspection report. [2014 Site ID:RD0524U01RM43.52]					

Photo 1 of 1 : SJR2014_RD0524U01RM43.52_1.jpg



Front view of the erosion.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
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U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

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Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.04	Rating **	M	Issue No.	924
LM End	3.04	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.912163 °	37.912163 °
				-121.324702 °	-121.324702 °
DWR ID	DWR_RD0524_01_s _ 2012_924				
Action/Comments					
Repair the levee slope damaged by livestock and prevent large animal access.					

No Photos

LM Start	3.10	Rating **	M	Issue No.	925
LM End	3.12	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.911382 °	37.911088 °
				-121.324928 °	-121.325113 °
DWR ID	DWR_RD0524_01_s _ 2012_925				
Action/Comments					
Exterminate rodents and backfill and compact or grout burrows.					

No Photos

LM Start	3.23	Rating **	C	Issue No.	1
LM End	3.31	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.908544 °	37.908544 °
				-121.324894 °	-121.324894 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: New erosion was found at the levee toe. Trees are present. 08/07/2012: The site has been repaired. Protecting riprap revetment has been placed at the levee shoulder and slope, but minor erosions are visible at the levee toe. 08/23/2011: Sloughing rip rap is visible on the site [2014 Site ID:RD0524U01RM43.83]					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.29	Rating **	U	Issue No.	5
LM End	3.31	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.908090 °	37.908090 °
				-121.325090 °	-121.325090 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: The levee toe seems to have been protected by river rocks and vegetation on site. [2014 Site ID:RD0524U01RM43.86]					

Photo 1 of 1 : SJR2014_RD0524U01RM43.86_1.jpg



View from upstream of the erosion.

LM Start	3.30	Rating **	A/W	Issue No.	186
LM End	3.30	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.908551 °	37.908551 °
				-121.325381 °	-121.325381 °
DWR ID	DWR_RD0524_01_s_2014_186				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	3.33	Rating **	A/W	Issue No.	926
LM End	3.35	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.908158 °	37.907872 °
				-121.325418 °	-121.325443 °
DWR ID	DWR_RD0524_01_s_2012_926				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.45	Rating **	M	Issue No.	56
LM End	3.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.906540 °	37.906540 °
				-121.325015 °	-121.325015 °
DWR ID	DWR_RD0524_01_s_2012_56				
Action/Comments					
Material					
Inspector Comments: Broken concrete pipes					

Photo 1 of 1 : FA_2014_RD0524_107_56_20141020_00067.jpg



Looking southwest at concrete pipes on landside toe.

LM Start	3.47	Rating **	U	Issue No.	93
LM End	3.47	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.906265 °	37.906265 °
				-121.324643 °	-121.324643 °
DWR ID	DWR_RD0524_01_s_2012_93				
Action/Comments					
Trim and thin trees to allow visibility of the ground and room to flood fight.					

Photo 1 of 1 : FA_2014_RD0524_107_93_20141020_00088.jpg



Looking northwest at low hanging tree branches on landside slope and toe.

LM Start	3.51	Rating **	M	Issue No.	177
LM End	3.51	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.905994 °	37.905994 °
				-121.324194 °	-121.324194 °
DWR ID	DWR_RD0524_01_f_2014_177				
Action/Comments					
Tree or limb					
Inspector Comments: Dead tree on landward toe.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.54	Rating **	U	Issue No.	57
LM End	3.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.905638 °	37.904430 °
				-121.323892 °	-121.324570 °
DWR ID	DWR_RD0524_01_s_2012_57				
Action/Comments					
Trim and thin trees to allow visibility of the ground and room to flood fight.					

Photo 1 of 1 : FA_2014_RD0524_107_57_20141020_00068.jpg



Looking south at dense trees on landward slope.

LM Start	3.55	Rating **	M	Issue No.	55
LM End	3.57	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.904630 °	37.904630 °
				-121.323610 °	-121.323610 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: The previous erosion was repaired. New erosion was found below the repaired levee slope. 08/13/2013: No significant change observed. 08/07/2012: The levee toe has been cut off along a 150 ft. long river stretch. The erosion is located just upstream of a river bend. [2014 Site ID:RD0524U01RM44.13]					

Photo 1 of 1 : SJR2014_RD0524U01RM44.13_1.jpg



View of the repaired site.

LM Start	3.68	Rating **	M	Issue No.	58
LM End	3.68	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.904113 °	37.904113 °
				-121.325080 °	-121.325080 °
DWR ID	DWR_RD0524_01_s_2012_58				
Action/Comments					
Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comments: Landowner cut steps into waterside slope.					

Photo 1 of 1 : FA_2014_RD0524_107_58_20141020_00069.jpg



Looking southeast steps cut into waterside slope.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

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Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.80	Rating **	M	Issue No.	927
LM End	3.80	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.902645 °	37.902645 °
				-121.326340 °	-121.326340 °
DWR ID	DWR_RD0524_01_s _ 2012_927				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	3.82	Rating **	M	Issue No.	59
LM End	3.82	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.902417 °	37.902417 °
				-121.326482 °	-121.326482 °
DWR ID	DWR_RD0524_01_s _ 2012_59				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	3.84	Rating **	M	Issue No.	928
LM End	3.85	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.902155 °	37.902002 °
				-121.326523 °	-121.326550 °
DWR ID	DWR_RD0524_01_s _ 2012_928				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	3.89	Rating **	M	Issue No.	187
LM End	3.89	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.901447 °	37.901447 °
				-121.326500 °	-121.326500 °
DWR ID	DWR_RD0524_01_s _ 2014_187				
Action/Comments					
Tree or limb					
Inspector Comments: Tree limb on waterward shoulder.					

Photo 1 of 1 : FA_2014_RD0524_107_187_20141020_00140.jpg



Looking northeast at tree limb on waterward slope.

LM Start	3.92	Rating **	M	Issue No.	94
LM End	3.92	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.900952 °	37.900952 °
				-121.326443 °	-121.326443 °
DWR ID	DWR_RD0524_01_s _ 2012_94				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Remove cactus					

Photo 1 of 1 : FA_2014_RD0524_107_94_20141020_00089.jpg



Looking southeast at cactus on waterside slope.

LM Start	3.93	Rating **	M	Issue No.	83
LM End	3.93	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.900854 °	37.900854 °
				-121.326438 °	-121.326438 °
DWR ID	DWR_RD0524_01_s _ 2012_83				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	4.07	Rating **	M	Issue No.	61
LM End	4.07	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.898925 °	37.898925 °
				-121.327015 °	-121.327015 °
DWR ID	DWR_RD0524_01_s_2012_61				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	4.08	Rating **	M	Issue No.	64
LM End	4.13	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.898832 °	37.898090 °
				-121.327092 °	-121.327457 °
DWR ID	DWR_RD0524_01_s_2012_64				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

No Photos

LM Start	4.13	Rating **	M	Issue No.	108
LM End	4.13	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.898035 °	37.898035 °
				-121.327447 °	-121.327447 °
DWR ID	DWR_RD0524_01_s_2012_108				
Action/Comments					
Repair slope instability.					

Photo 1 of 1 : FA_2014_RD0524_107_108_20141020_00099.jpg



Looking southwest at caving slope on landside of levee.

*** Location**
 LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**
 A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
 Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	4.19	Rating **	A/W	Issue No.	109
LM End	4.19	Issue Type +	Ma	Location *	WS
Category	Interior Drainage & Piping Systems			GPS Latitude/Longitude	
				Start	End
Item	Metal Pipes			37.897113 °	37.897113 °
				-121.327895 °	-121.327895 °
DWR ID	DWR_RD0524_01_s_2012_109				
Action/Comments					
Inspector Comments: Landowner has temporarily repaired pipe with tape. Pipe should be repaired to stop further damage to the levee. Landowner repaired steel pipe, but pvc piping is still causing damage to waterward slope.					

Photo 1 of 5 : FA_2014_RD0524_107_109_20141023_00211.jpg



Looking east at repaired pipe on waterward slope.

LM Start	4.19	Rating **	A/W	Issue No.	109 (cont)
LM End	4.19	Issue Type +	Ma	Location *	WS

Photo 2 of 5 : FA_2014_RD0524_107_109_20141020_00100.jpg



Looking east at damaged pipe on waterside slope. (Spring 2012)

LM Start	4.19	Rating **	A/W	Issue No.	109 (cont)
LM End	4.19	Issue Type +	Ma	Location *	WS

Photo 3 of 5 : FA_2014_RD0524_107_109_20141020_00101.jpg



Looking northeast at overview of irrigation system on waterside slope.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	4.19	Rating **	A/W	Issue No.	109 (cont)
LM End	4.19	Issue Type +	Ma	Location *	WS
Category	Interior Drainage & Piping Systems			GPS Latitude/Longitude	
				Start	End
Item	Metal Pipes			37.897113 °	37.897113 °
				-121.327895 °	-121.327895 °
DWR ID	DWR_RD0524_01_s _ 2012_109				
Action/Comments					
Inspector Comments: Landowner has temporarily repaired pipe with tape. Pipe should be repaired to stop further damage to the levee. Landowner repaired steel pipe, but pvc piping is still causing damage to waterward slope.					

Photo 4 of 5 : FA_2014_RD0524_107_109_20141020_00102.jpg



Looking east at irrigation system on waterside slope.

LM Start	4.19	Rating **	A/W	Issue No.	109 (cont)
LM End	4.19	Issue Type +	Ma	Location *	WS

Photo 5 of 5 : FA_2014_RD0524_107_109_20141020_00103.jpg



Looking east at irrigation system damaging waterside toe.

LM Start	4.40	Rating **	M	Issue No.	65
LM End	4.56	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.894587 °	37.892493 °
				-121.329253 °	-121.328267 °
DWR ID	DWR_RD0524_01_s _ 2012_65				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	4.44	Rating **	M	Issue No.	112
LM End	4.58	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.893928 °	37.892230 °
				-121.329203 °	-121.328187 °
DWR ID	DWR_RD0524_01_s_2012_112				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	4.53	Rating **	U	Issue No.	79
LM End	4.54	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.892230 °	37.892230 °
				-121.327930 °	-121.327930 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: No significant change observed. 08/07/2012: The erosion is located at the inside of a river bend. Site is covered with broken concrete blocks and other debris. [2014 Site ID:RD0524U01RM45.07]					

Photo 1 of 1 : SJR2014_RD0524U01RM45.07_1.jpg



Downstream view of the erosion site.

LM Start	4.64	Rating **	M	Issue No.	66
LM End	4.64	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.891365 °	37.891365 °
				-121.328633 °	-121.328633 °
DWR ID	DWR_RD0524_01_s_2012_66				
Action/Comments					
Garbage					

Photo 1 of 1 : FA_2014_RD0524_107_66_20141020_00073.jpg



Garbage at landward toe next to ramp at LM 4.64

*** Location**
 LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**
 A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
 Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	4.65	Rating **	M	Issue No.	63
LM End	4.65	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.891285 °	37.891285 °
				-121.328728 °	-121.328728 °
DWR ID	DWR_RD0524_01_s_2012_63				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : FA_2014_RD0524_107_63_20141020_00072.jpg



Looking south at dense trees on landside slope.

LM Start	4.67	Rating **	A/W	Issue No.	113
LM End	4.67	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.890973 °	37.890973 °
				-121.328970 °	-121.328970 °
DWR ID	DWR_RD0524_01_s_2012_113				
Action/Comments					
Trim trees to at least five feet above ground level.					

Photo 1 of 1 : FA_2014_RD0524_107_113_20141020_00106.jpg



Looking north at dense trees on landside slope.

LM Start	4.71	Rating **	C	Issue No.	90
LM End	4.71	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.889809 °	37.889809 °
				-121.329342 °	-121.329342 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: The erosion was repaired. 08/13/2013: No significant change observed. 08/07/2012: The site has been visited by boat survey. No significant change observed 08/23/2011: Cracking erosion along the levee bank. Erosion appears to be caused by river flows. [2014 Site ID:RD0524U01RM45.27]					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.20	Rating **	A/W	Issue No.	72
LM End	5.20	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.884075 °	37.884075 °
				-121.332118 °	-121.332118 °
DWR ID	DWR_RD0524_01_s_2012_72				
Action/Comments					
Trim trees over roadway to at least 12 feet above ground level.					

No Photos

LM Start	5.24	Rating **	M	Issue No.	115
LM End	5.24	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.883587 °	37.883587 °
				-121.332100 °	-121.332100 °
DWR ID	DWR_RD0524_01_s_2012_115				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comments: Vehicle traffic created a ramp on landward slope.					

Photo 1 of 1 : FA_2014_RD0524_107_115_20141020_00107.jpg



Looking northwest at slope damage on landward slope.

LM Start	5.26	Rating **	M	Issue No.	116
LM End	5.26	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.883170 °	37.883170 °
				-121.332227 °	-121.332227 °
DWR ID	DWR_RD0524_01_s_2012_116				
Action/Comments					
Tree or limb					
Inspector Comments: Dead tree limbs on waterside slope.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.32	Rating **	M	Issue No.	85
LM End	5.38	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.882377 °	37.881498 °
				-121.332598 °	-121.332800 °
DWR ID	DWR_RD0524_01_s_2012_85				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	5.43	Rating **	M	Issue No.	932
LM End	5.46	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.880945 °	37.880522 °
				-121.332837 °	-121.332918 °
DWR ID	DWR_RD0524_01_s_2012_932				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	5.43	Rating **	U	Issue No.	125
LM End	5.43	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.880320 °	37.880320 °
				-121.333266 °	-121.333266 °
DWR ID					
Action/Comments					
Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013: The erosion seems to be getting worse. More material sloughing visible. 08/07/2012: The erosion is underneath an irrigation pipe. The likely cause of the erosion is the pipe leakage. [2014 Site ID:RD0524U01RM45.97]					

Photo 1 of 1 : SJR2014_RD0524U01RM45.97_1.jpg



Close view of the erosion and the pipe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.44	Rating **	M	Issue No.	178
LM End	5.44	Issue Type +	Ma	Location *	N/A
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.880806 °	37.880806 °
				-121.332833 °	-121.332833 °
DWR ID	DWR_RD0524_01_f_2014_178				
Action/Comments					
Tree or limb					
Inspector Comments: Downed tree on landward toe.					

Photo 1 of 1 : FA_2014_RD0524_107_178_20141023_00212.jpg



Looking south at downed tree on landward slope.

LM Start	5.46	Rating **	A/W	Issue No.	931
LM End	5.46	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.880575 °	37.880575 °
				-121.332890 °	-121.332890 °
DWR ID	DWR_RD0524_01_s_2012_931				
Action/Comments					
Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: LMA grouted rodent holes.					

Photo 1 of 2 : FA_2014_RD0524_107_931_20141023_00213.jpg



Looking north at typical view of grouted rodent holes on landward shoulder and slope.

LM Start	5.46	Rating **	A/W	Issue No.	931 (cont)
LM End	5.46	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2014_RD0524_107_931_20141023_00214.jpg



Looking north at typical view of grouted rodent holes on waterward slope.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.47	Rating **	M	Issue No.	118
LM End	5.47	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.880323 °	37.880323 °
				-121.332968 °	-121.332968 °
DWR ID	DWR_RD0524_01_s_2012_118				
Action/Comments					
Repair slope instability.					
Inspector Comments: Slope damage caused by human activity.					

Photo 1 of 3 : FA_2014_RD0524_107_118_20141020_00108.jpg



Looking west at slope damage on landside slope.

LM Start	5.47	Rating **	M	Issue No.	118 (cont)
LM End	5.47	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : FA_2014_RD0524_107_118_20141020_00109.jpg



Looking southeast at damaged slope.

LM Start	5.47	Rating **	M	Issue No.	118 (cont)
LM End	5.47	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : FA_2014_RD0524_107_118_20141020_00110.jpg



Looking east at slope caving on landside slope.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.48	Rating **	M	Issue No.	73
LM End	5.48	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.880085 °	37.880085 °
				-121.333045 °	-121.333045 °
DWR ID	DWR_RD0524_01_s_2012_73				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	5.50	Rating **	M	Issue No.	189
LM End	5.50	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.879998 °	37.879998 °
				-121.333079 °	-121.333079 °
DWR ID	DWR_RD0524_01_s_2014_189				
Action/Comments					
Prunings Inspector Comments: Prunings on landward shoulder should be removed.					

No Photos

LM Start	5.57	Rating **	M	Issue No.	96
LM End	5.57	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.878918 °	37.878918 °
				-121.333148 °	-121.333148 °
DWR ID	DWR_RD0524_01_s_2012_96				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.65	Rating **	C	Issue No.	127
LM End	5.66	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.877880 °	37.877880 °
				-121.332550 °	-121.332550 °
DWR ID					

No Photos

Action/Comments					
Inspector Comments: 6/19/2014: The erosion was repaired. 08/13/2013: The boat survey found no significant change at this site, except slight animal activity was visible at the site. 08/07/2012: : The site has been visited by boat survey. No significant change observed 08/23/2011: No significant change observed on site. 09/07/2010: No significant change observed on site. Erosion site is located beneath Howard Road Bridge. Majority of the existing rip rap has slipped, dragging away levee materials and exposing the underlying soft soil. 08/06/2010: Recommend for annual assessment and monitoring during flood events, per CLRO. 09/30/2009: No major change observed since the last visit; upper portion of existing revetment has slipped, exposing the degrading bank; note that site # is the same as RM46.30, LM5.69 found in the CLRO CES Evaluation 2008 Report; site was previously rated "M". 11/04/2008: Previously repaired using rock revetment; upper portion of the revetment is sliding, causing deformation on the levee slope; site is upstream of Howards Road Bridge. [2014 Site ID:RD0524U01RM46.12]					

LM Start	5.69	Rating **	M	Issue No.	117
LM End	5.69	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.877272 °	37.877272 °
				-121.332400 °	-121.332400 °
DWR ID	DWR_RD0524_01 f _ 2013_117				

No Photos

Action/Comments					
Trim trees to at least five feet above ground level.					

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.84	Rating **	M	Issue No.	267
LM End	5.84	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.875328 °	37.875328 °
				-121.333050 °	-121.333050 °
DWR ID	DWR_RD0524_01_s_2012_267				
Action/Comments					
Prunings Inspector Comments: Prunings at landside toe should be burned or removed.					

No Photos

LM Start	5.86	Rating **	U	Issue No.	128
LM End	5.86	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR Erosion Survey			37.874370 °	37.874370 °
				-121.332850 °	-121.332850 °
DWR ID					
Action/Comments					
Inspector Comments: 06/19/2014: No significant change observed. 08/13/2013: No significant change observed. 08/07/2012: The erosion is near a water-intake structure. Pipe leakage likely caused the erosion. [2014 Site ID:RD0524U01RM46.39]					

Photo 1 of 1 : SJR2014_RD0524U01RM46.39_1.jpg



Front view of the site.

LM Start	5.86	Rating **	A/W	Issue No.	69
LM End	5.86	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			37.877298 °	37.875073 °
				-121.332343 °	-121.333168 °
DWR ID	DWR_RD0524_01_s_2012_69				
Action/Comments					
No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comments: District has grouted rodent holes.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.92	Rating **	M	Issue No.	74 (cont)
LM End	5.92	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			37.874240 °	37.874165 °
				-121.333185 °	-121.333155 °
DWR ID	DWR_RD0524_01_s_2012_74				
Action/Comments					
Note and monitor erosion site.					
Inspector Comments: Erosion on landward slope around intake pipe.					

Photo 2 of 3 : FA_2014_RD0524_107_74_20141023_00216.jpg



Looking west at erosion around intake pipe on landward slope.

LM Start	5.92	Rating **	M	Issue No.	74 (cont)
LM End	5.92	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : FA_2014_RD0524_107_74_20141020_00076.jpg



Erosion at waterward toe and around irrigation pipe at LM 5.92

LM Start	5.92	Rating **	A/W	Issue No.	190
LM End	5.92	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.874197 °	37.874197 °
				-121.333208 °	-121.333208 °
DWR ID	DWR_RD0524_01_s_2014_190				
Action/Comments					
Pipe Inspector Comments: Landowner is replacing pump and left old pipe on waterward shoulder.					

Photo 1 of 1 : FA_2014_RD0524_107_190_20141020_00141.jpg



Looking southeast at old pump shaft on waterward shoulder.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	5.93	Rating **	U	Issue No.	119
LM End	5.93	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.873893 °	37.873893 °
				-121.332978 °	-121.332978 °
DWR ID	DWR_RD0524_01_s _ 2012_119				
Action/Comments					
Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comments: Landowner is using damaged area as a ramp.					

Photo 1 of 2 : FA_2014_RD0524_107_119_20141020_00111.jpg



Looking west at unauthorized ramp and landside slope damage.

Photo 2 of 2 : FA_2014_RD0524_107_119_20141020_00112.jpg



Looking southwest at damaged slope and ramp on landside slope.

LM Start	5.97	Rating **	M	Issue No.	86
LM End	5.97	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.873678 °	37.873678 °
				-121.332550 °	-121.332550 °
DWR ID	DWR_RD0524_01_s _ 2012_86				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	6.01	Rating **	M	Issue No.	120
LM End	6.01	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.873347 °	37.873347 °
				-121.332028 °	-121.332028 °
DWR ID	DWR_RD0524_01_s_2012_120				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	6.02	Rating **	M	Issue No.	81
LM End	6.02	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.873300 °	37.873300 °
				-121.331928 °	-121.331928 °
DWR ID	DWR_RD0524_01_s_2012_81				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

LM Start	6.05	Rating **	M	Issue No.	933
LM End	6.05	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			37.873047 °	37.873047 °
				-121.331408 °	-121.331408 °
DWR ID	DWR_RD0524_01_s_2012_933				
Action/Comments					
Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comments: Landowner cut steps into landside slope.					

Photo 1 of 1 : FA_2014_RD0524_107_933_20141020_00156.jpg



Looking north at steps cut into landward slope.

*** Location**
 LS : Land Side N/A : Not Applicable
 WS : Water Side
 CR : Crown

**** Rating**
 A : Acceptable N : Not Inspected/Rated
 M : Minimally Acceptable C : Corrected
 U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
 Ma : Maintenance Deficiency
 Ob : Design & System Obsolescence
 En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	6.08	Rating **	M	Issue No.	191
LM End	6.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.872844 °	37.872844 °
				-121.331070 °	-121.331070 °
DWR ID	DWR_RD0524_01_s_2014_191				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					
Inspector Comments: Cactus at landward toe.					

No Photos

LM Start	6.21	Rating **	M	Issue No.	268
LM End	6.21	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			37.871137 °	37.871137 °
				-121.330138 °	-121.330138 °
DWR ID	DWR_RD0524_01_s_2012_268				
Action/Comments					
Pipe Inspector Comments: Open abandoned 10" pipe on waterside slope below flood elevation. Pipe should be removed or properly abandoned.					

Photo 1 of 1 : FA_2014_RD0524_107_268_20141020_00150.jpg



Looking southeast at abandoned pipe on waterside slope.

LM Start	6.23	Rating **	M	Issue No.	98
LM End	6.23	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			37.870842 °	37.870842 °
				-121.330000 °	-121.330000 °
DWR ID	DWR_RD0524_01_s_2012_98				
Action/Comments					
Trim trees to at least five feet above ground level.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2014

Reclamation District No. 0524 Middle Roberts Island

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	6.20	10/20/2014 10/20/2014	Richard Willoughby

LM Start	6.23	Rating **	A/W	Issue No.	97
LM End	6.23	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			37.870840 °	37.870840 °
				-121.329993 °	-121.329993 °
DWR ID	DWR_RD0524_01_s_2012_97				
Action/Comments					
Remove the wild growth other than native grasses from the levee slopes.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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